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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,835	08/06/2001	Xiaochun Nie	004860.P2640	1228

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02/09/2005

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EXAMINER

HAILU, TADESSE

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,835

Applicant(s)

NIE ET AL.

Examiner

Tadesse Hailu

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,10,11,14-18,28,37,39-43,53 and 57-60 is/are rejected.
- 7) ☐ Claim(s) 2-9,12,13,19-27,29-36,38,44-52,54-56 and 61-63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the Amendment, Remarks and Arguments submitted on 11/29/2004 for the application number 09/923,835 filed 8/6/2001.

Status of the claims

2. The pending claims 1 through 63 are examined herein as follows.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 10, 11, 14-18, 28, 37, 39-43, 53, and 57-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Guedalia (US Pat No 6,536,043).

The present invention relates to methods and apparatuses for compressing, processing, transmitting, and receiving multiple views of an object over a network of computer systems. Likewise, **Guedalia** relates to methods and systems for processing, such as encoding and transmitting digital multimedia data over a network.

With regard to claim 1:

Guedalia discloses an object movie processing method for processing a data set (e.g., blocks) enabling interactive random access for different views of an object (Fig. 6, column 29, 30-40, column 30, lines 48-59).

The method of Guedalia discloses storing a plurality of frames of said object (column 27, lines 46-53, Fig. 2, #35), said plurality of frames representing a set of views of said object (column 27, lines 46-53).

The method of Guedalia also discloses assigning a reference number to each of said plurality of frames (column 28, lines 32-43).

The method of Guedalia also discloses arranging said plurality of frames in a preferred layout (column 31, lines 37-46, column 35, lines 1-23).

The method of Guedalia further discloses dividing said preferred layout into a plurality of blocks having frames sharing spatial similarities and compressing each of said plurality of blocks separately (Abstract, Figs. 3A, 3B, column 34, lines 24-31, column 3, lines 61-column 4, lines 4).

With regard to claim 10:

Guedalia further discloses that said method is performed by a server computer system (Fig. 1, column 8, lines 46-50, column 9, lines 51-55).

With regard to claim 11:

Guedalia further discloses that said method is performed by a world-wide web server (Fig. 11, column 2, lines 16-38, column 3, lines 44-47).

With regard to claim 14:

Guedalia discloses A digital processing (Client processor (Fig.2) and Sever processor (Fig. 1) implemented method for receiving and using a data set enabling interactive random access for different views of an object (Abstract).

The method of Guedalia further discloses transmitting a request to receive said data set, said data set including frames of said object, said frames representing views of said object (Fig. 2, abstract, column 5, lines 60-column 6, lines 28, column 6, lines 45-64).

The method of Guedalia further discloses receiving said data set wherein said frames were arranged in a preferred layout, said preferred layout was divided into a plurality of blocks wherein each of said plurality of blocks was compressed separately (Figs. 3A, 3B, 7, and 9, column 8, lines 8-14, column 11, lines 26-31, column 12, lines 1-6).

With regard to claim 15:

The method of Guedalia further discloses that said input further comprising manipulating said object using a cursor, which is displayed on a display device (column 26, lines 46-57, column 35, lines 24-37, lines 63-65).

With regard to claim 16:

The method of Guedalia further discloses receiving an input which requests a selected number of said views (column 6, lines 39-43, column 7, lines 1-6, column 26, lines 46-57, column 35, lines 24-37, lines 63-65).

The method of Guedalia further discloses mapping (Fig. 10) said input to a selected appropriate number of frames in said frames (column 33, lines 1-5, column 35, lines 20-23, Figs 10 and 14).

The method of Guedalia further discloses decompressing said selected appropriate number of frames (column 17, lines 5-6, 23-24, column 27, lines 51-66).

With regard to claim 17:

The method of Guedalia further discloses a method as in claim 16 further comprising: storing said selected appropriate number of frames that are compressed (column 27, lines 57-59, column 29, lines 3-6).

The method of Guedalia further discloses allowing a user to playback said selected number of said views in a movie-like sequence (column 10, lines 6-7, column 12, lines 62-63).

With regard to claim 18:

The method of Guedalia further discloses that said method is performed by a digital processing system (Figs. 1 and 2) or and wherein said data set is received from a server computer system (Fig. 1, column 29, lines 13-28, column 30, lines 61-65).

With regard to claim 28:

Independent claim 28 corresponds generally to independent claim 1 and recites similar features in a computer readable storage medium form, and therefore is rejected under the same rationale.

With regard to claim 37:

Independent claim 37 corresponds generally to independent claim 10 and recites similar features in a computer readable storage medium form, and therefore is rejected under the same rationale.

With regard to claim 39:

Independent claim 39 corresponds generally to independent claim 14 and recites similar features in a computer readable storage medium form, and therefore is rejected under the same rationale.

With regard to claim 40:

Independent claim 40 corresponds generally to independent claim 15 and recites similar features in a computer readable storage medium form, and therefore is rejected under the same rationale.

With regard to claim 41:

Independent claim 41 corresponds generally to independent claim 16 and recites similar features in a computer readable storage medium form, and therefore is rejected under the same rationale.

With regard to claim 42:

Independent claim 42 corresponds generally to independent claim 17 and recites similar features in a computer readable storage medium form, and therefore is rejected under the same rationale.

With regard to claim 43:

Independent claim 43 corresponds generally to independent claim 18 and recites similar features in a computer readable storage medium form, and therefore is rejected under the same rationale.

With regard to claim 53:

Independent claim 53 corresponds generally to independent claim 1 and recites similar features in a system form, and therefore is rejected under the same rationale.

With regard to claim 57:

Independent claim 57 corresponds generally to independent claim 14 and recites similar features in a system form, and therefore is rejected under the same rationale.

With regard to claim 58:

Independent claim 58 corresponds generally to independent claim 15 and recites similar features in a system form, and therefore is rejected under the same rationale.

With regard to claim 59:

Independent claim 59 corresponds generally to independent claim 16 and recites similar features in a system form, and therefore is rejected under the same rationale.

With regard to claim 60:

Independent claim 60 corresponds generally to independent claim 17 and recites similar features in a system form, and therefore is rejected under the same rationale.

Response to Arguments

4. Applicant's arguments filed 11/29/04 have been fully considered but they are not persuasive. The Applicant addresses how the claimed "block" language element used in both the instant invention and '043 patent. Applicant argues that the term "block" in '043 patent does not have similar meaning as the instant invention. The Examiner disagrees because the argued element "Block" has the same meaning as claimed in the instant invention. '043 patent describes that the data blocks themselves are comprised of frames which can be randomly accessed (col 3, lines 60-65, col 4, lines 46-52). The '043 patent further describes that successive blocks could be encoded using spatial vector quantization and temporal wavelets (col 34, lines 24-31).

Regarding claim 1, the Applicant argues that "dividing said preferred layout into a plurality of blocks having frames sharing spatial similarities and compressing each of said plurality of blocks separately " where the preferred layout is an arrangement of a plurality of frames which represent a set of views of an object. The '043 patent doesn't teach this technique. The Examiner disagrees because as indicated above the term "block" has similar meaning with current invention, thus, the rest of the argued limitation is also disclosed in the '043 patent. As given rejection above, The method of Guedalia further discloses dividing said preferred layout into a plurality of blocks having frames

sharing spatial similarities and compressing each of said plurality of blocks separately (Abstract, Figs. 3A, 3B, column 34, lines 24-31, column 3, lines 61-column 4, lines 4).

Regarding claim 14, the Applicant argues that "receiving said data set wherein said frames were arranged in a preferred layout, said preferred layout was divided into a plurality of blocks wherein each of said plurality of blocks was compressed separately" and wherein the data set include frames of an object and frames represent views of the object. Are not disclosed in '043 patent. The Examiner disagrees. The method of Guedalia further discloses receiving said data set wherein said frames were arranged in a preferred layout, said preferred layout was divided into a plurality of blocks wherein each of said plurality of blocks was compressed separately (Figs. 3A, 3B, 6, 7, and 9, column 8, lines 8-14, column 11, lines 26-31, column 12, lines 1-6). Guedalia further discloses structure or layout of a block partitioned or divided into frames and can be accessed randomly (e.g., column 19, lines 29-32, Fig. 6).

Allowable Subject Matter

5. Claims 2-9, 12-13, 19-27, 29-36, 38, 44-52, 54-56, and 61-63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: While Guedalia discloses encoding (compressing) frames, Guedalia does not,

however, disclose "a compressing sequence includes going away from said key frame until reaching a boundary of each plurality of blocks to cover each of said non-key frames" as specified in the objected claims.

CONCLUSION

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

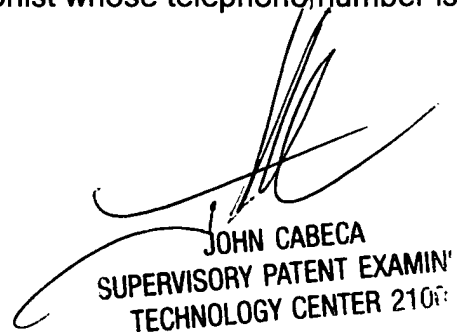
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tadesse Hailu, whose telephone number is (571) 272-4051. The Examiner can normally be reached on M-F from 10:00 - 630 ET. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeza, can be reached at (571) 272-4048 Art Unit 2173.

Art Unit: 2173

9. An inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Examiner Tadesse Hailu
Art Unit 2173 - Operator Interface
2/4/05



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SUPERVISORY PATENT EXAMINER
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